

We claim:

1. A process for the preparation of mineral crystals, the process comprising germinating seeds and growing the roots thus germinated in an aqueous solution containing one or more metal salts at a temperature in the range of 20 to 35°C for a period of 2 to 7 days to obtain the mineral crystals of respective metal carbonates.
2. The process as claimed in claim 1, wherein in the seeds used are selected from a group consisting of *Cicer arietinum*, *Pisum sativum*, *Lycopersicon esculentum*, *Oryza sativa*, *Triticum aestivum*, *Coriandrum sativum*, *Papaver somniferum*, *Ocimum basilicum*, *Trigonella foenum-graecum*, *Vigna radiata*, *Zea mays*, *Hordeum vulgare*, *Brassica campestris*, *Vigna mungo*, *Vigna unguiculata*, *Ricinus communis*, *Solanum melongena*, *Paspalum scrobiculatum*, *Raphanus sativus*, *Gossypium herbaceum*, *Helianthus annuus*, *Linum usitatissimum*, *Luffa cylindrica*, *Cucumis sativus*, *Cymbopogon flexuosus*, *Daucus carota*, *Abelmoschus esculentus*, *Anethum graveolens*, *Cajanus cajan*, *Capsicum annuum*, *Carica papaya*, *Datura innoxia*, *Catharanthus roseus*, *Spinacia oleracea* and *Citrullus vulgaris*.
3. The process as claimed in claim 1, wherein the seeds are washed and sterilized prior to germination.
4. The process as claimed in claim 3, wherein the seeds are sterilized using sodium hypochlorite solution.
5. The process as claimed in claim 4, wherein the seeds are sterilized by treating the same with sodium hypochlorite solution for a time period in the range of 2-4 minutes.
6. The process as claimed in claim 1, wherein the seeds are germinated in a dark room at a temperature in the range of 20 to 30°C for a time period in the range of 2 to 5 days.
7. The process as claimed in claim 1, wherein the metal salt used is selected from the group consisting of salts of  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ , and  $\text{Ba}^{2+}$ , and mixtures thereof.
8. The process as claimed in claim 7, wherein the metal salts used are selected from a group comprising  $\text{CaCO}_3$ ,  $\text{SrCO}_3$ ,  $\text{BaCO}_3$  and their mixtures thereof.

9. The process as claimed in claim 8, wherein the concentration of metal ions in the aqueous solution is in the range of about 0.001 to about 1 M.
10. The process as claimed in claim 1, wherein the crystal formed are obtained by filtration and drying.